REMARKS

Reconsideration of the above-identified patent application in view of the present amendment is respectfully requested.

Claims 2-7 stand rejected as being indefinite under 35 U.S.C. §112, second paragraph. Claims 2-4, 8, 9, 11, 12, and 14 stand rejected as being anticipated under 35 U.S.C. §102(b) by Fuhrimann, U.S. Patent No. 3,593,519. Claims 2, 3, 5, 7-9, and 14 stand rejected under 35 U.S.C. §102(b) as anticipated by Cochran et al., U.S. Patent No. 4,332,134. Claims 1 and 10 stand rejected as being obvious over Fuhrimann in view of Cochran et al. Claims 6 and 13 stand rejected as being obvious over Fuhrimann in view of Cochran et al. and further in view of Examiner's Official Notice.

This amendment amends claims 2 and 4-7 and cancels claim 3. The amendment of claim 2 and the cancellation of claim 3 overcomes the indefinite rejection under 35 U.S.C. §112, second paragraph.

With regard to the rejections of claim 1, 2, and 4-14, these rejections are respectfully traversed. Particularly, both Fuhrimann and Cochran et al. fail to disclose each feature of independent claims 1, 2, and 8.

Specifically, it is respectfully suggested that one having ordinary skill in the art of hydrostatic transmissions would recognize that neither Fuhrimann nor Cochran et al. discloses a hot oil shuttle valve, as recited in claims 1 and 2, or a shuttle valve for diverting hot fluid, as recited in claim 8. One skilled in the art of hydrostatic transmissions will recognize that a shuttle valve, as recited in claims 1, 2, and 8, in a closed loop of a hydrostatic transmission is used to remove hot fluid (oil) from the low pressure line of the closed loop so as to enable cool fluid from the charge pump to be added to the closed loop. Thus, in a hydrostatic transmission with a hot oil shuttle valve, the full flow (approximately 100%) of the charge pump is discharged into the closed loop. This discharged flow from the charge pump forces hot oil through the hot oil

shuttle valve to the reservoir. As such, there is no direct communication from the charge pump to the hot oil shuttle valve. Instead, the hot oil shuttle valve only communicates directly with the high pressure line of the closed loop, the low pressure line of the closed loop, and the reservoir.

With specific reference to Fuhrimann, one skilled in the art of hydrostatic transmissions will recognize that reference 11 is not a shuttle valve, as set forth in the claims of the present invention. Instead, reference 11 of Fuhrimann is a combination valve that is made up of two check valves and a single relief valve. The two check valves (called pressure relief valves at Col. 2, lines 69-72 of Fuhrimann) are needed to allow oil to flow from the charge pump into the low pressure line of the closed loop. The amount of oil flowing through the check valves is equal to the amount of leakage of the closed loop, as recognized by Fuhrimann at Col. 2, lines 63-69. The relief valve of reference 11 of Fuhrimann enables excess flow from the charge pump to be directed back to the reservoir, as recognized by Fuhrimann at Col. 2, lines 1-8. Thus, unlike a hot oil shuttle valve of the present invention, the combination valve of reference 11 includes four ports; one communicating directly with each of the high and low pressure lines of the closed loop (lines 12 and 13), one communicating directly with the charge pump (line 29), and one communicating directly with the reservoir (line 14). Since the combination valve 11 communicates directly with the charge pump and only replaces leakage, one skilled in the art of hydrostatic transmissions will recognize that reference 11 is not a shuttle valve, as recited in claims 1, 2, and 8. Therefore, the claims patentable define over Fuhrimann and are in a condition for allowance.

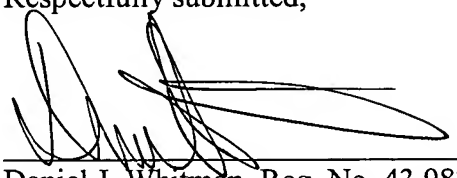
With regard to Cochran et al., one skilled in the art will recognize that bleed off valves 32 and 34 are also not shuttle valves, as recited in independent claims 1, 2, and 8. The bleed off valves 32 and 34 of Cochran et al. communicate directly with the discharge of the charge pump 12 (i.e., line 60 of Fig. 1). The bleed off valves 32 and 34 act as relief valves for directing excess flow discharged from the charge pump 12 back to the reservoir 20. Thus, in the system of Cochran et al., the charge pump only provides

enough fluid to the loop to make up for leakage within the loop. As set forth above, one skilled in the art of hydrostatic transmissions will recognize that, with a hot oil shuttle valve, the full flow (approximately 100%) of the charge pump is discharged into the loop and that there is no direct communication from the charge pump to the hot oil shuttle valve. Therefore, one skilled in the art will recognize that the bleed off valves 32 and 34 of Cochran et al. are not shuttle valves as recited in independent claims 1, 2, and 8. Thus, claims 1, 2, and 4-14 patentably define over Cochran et al. and are in a condition for allowance.

In view of the foregoing, it is respectfully submitted that the above-identified patent application is in condition for allowance, and allowance of the above-identified patent application is respectfully requested.

Should the Examiner wish to discuss any of the foregoing in more detail, the undersigned attorney would welcome a telephone call.

Respectfully submitted,



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